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Glucose-insulin-potassium infusion in patients treated with primary percutaneous coronary intervention for acute myocardial infarction

Submission date 17/05/2005	**Recruitment status** No longer recruiting	[_] Prospectively registered [_] Protocol [_] Statistical analysis plan [X] Results [_] Individual participant data
Registration date 20/05/2005	**Overall study status** Completed	
Last Edited 15/02/2008	**Condition category** Circulatory System	

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
99.028

Study information

Scientific Title

Acronym
Glucose-Insulin-Potassium Study (GIPS)

Study objectives
In this study we considered the question of whether adjunction of glucose-insulin-potassium (GIK) infusion to primary coronary transluminal angioplasty (PTCA) is effective in patients with an acute myocardial infarction (MI).

Ethics approval required
Old ethics approval format

Ethics approval(s)
Not provided at time of registration

Primary study design
Interventional

Study design
Randomised controlled trial

Study type(s)
Not Specified

Health condition(s) or problem(s) studied
ST elevation myocardial infarction (mi)

Interventions
After admission, patients were randomly assigned to either glucose-insulin-potassium (GIK) infusion or no infusion. In patients randomized to GIK, a continuous infusion of 80 mmol potassium chloride in 500 ml 20% glucose with a rate of 3 ml/kg body weight/hour over an 8- to 12-hour period in a peripheral venous line was given, as soon as possible. A continuous infusion of short-acting insulin (50 U Actrapid) in 50 ml 0.9% sodiumchloride was started. Baseline insulin-infusion dose and hourly adjustments of the insulin dose were based on an algorithm to obtain blood-glucose levels between 7.0 and 11.0 mmol/l.

Intervention Type
Drug

Phase
Not Specified

Drug/device/biological/vaccine name(s)
glucose-insulin-potassium

Primary outcome(s)
30-day mortality

Key secondary outcome(s)
Recurrent infarction, repeat coronary angioplasty, and the composite incidence of death, recurrent infarction, or repeat coronary angioplasty.

Completion date
30/09/2001

Eligibility

Key inclusion criteria
All consecutive patients with symptoms consistent with acute MI of >30 min duration, presenting within 24 hours after the onset of symptoms and with an ST-segment elevation of more than 1 mm (0.1 mV) in two or more contiguous leads on the electrocardiogram, or new onset left bundle branch block, were evaluated for inclusion in this single-center study. Patients presented at our center and patients referred for treatment of high-risk myocardial infarction (MI) from nine referring hospitals without angioplasty facilities were included.

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Not Specified

Sex
Not Specified

Key exclusion criteria
Patients were excluded when pre-treated with thrombolysis or when an illness associated with a marked restricted life expectancy was present.

Date of first enrolment
01/04/1998

Date of final enrolment
30/09/2001

Locations

Countries of recruitment
Netherlands

Study participating centre
Hanzeplein 1
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Netherlands
30.001

Sponsor information

Organisation
Netherlands Heart Foundation (Netherlands)

ROR
https://ror.org/05nxhgm70

Funder(s)

Funder type
Charity

Funder Name
Netherlands Heart Foundation (99.028)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	02/06/2005		Yes	No